

THE *Journal* AER OF THE

IN THIS ISSUE:

October, 1949

Volume IX, Number 2

RADIO SERVES THE UPPER GRADES by T. J. Lubera . . .	15
RADIO EDUCATION IN GERMANY by Joe A. Callaway . . .	17
METHODS OF TEACHING THE RADIO LANGUAGE COURSE by Walter Meiden	18
EDUCATIONAL STATIONS OF THE NATION—WCAL by Milford C. Jensen	20
COLLEGE RADIO WORKSHOPS—A SURVEY by Sidney A. Dimond	22

OTHER FEATURES: WHO? WHAT? WHERE? WHEN? inside front cover. EDITORIAL, page 13. THE PRESIDENT'S PAGE, page 14. EVENTS—PAST AND FUTURE, page 23. ALPHA EPSILON RHO, inside back cover. RADIO WORKSHOPS, inside back cover. IDEA EXCHANGE, inside back cover. AER RECORD REVIEW, back cover.

SCHOOL BROADCAST CONFERENCE: CHICAGO, OCTOBER 18-20

THE ASSOCIATION FOR EDUCATION BY RADIO

Who? What? Where? When?

The FCC hearings on TV rule making, originally scheduled to open August 29, were postponed until September 26.

Making Democracy Work is the theme for the twenty-ninth observance of American Education Week, November 6-12, 1949.

Don't Sell Education Short!—the Editorial which appeared in the September *AER Journal*—was reprinted in the *Congressional Record* of August 23, 1949, p. A5765.

Elsie Dick, popular director of education and public service programs for the Mutual Broadcasting System, lost her life in a plane crash near Bombay, India, on July 12.

Reinhold Niebuhr, well-known theologian, stated recently that "vulgarization of American cultural standards will follow the spread of television" if its programs are not improved.

Citizen of the World, a documentary by Norman Corwin telling about the many specialized UN agencies working in different parts of the world, was broadcast on the CBS network on July 10.

W. Ferron Halvorson, director, Station WCAT, South Dakota School of Mines and Technology, Rapid City, has been given the additional assignment of director of public relations for his institution.

Station WOI-PM, Iowa State College, Ames, began broadcasting a regular service on July 1, with a Monday through Saturday schedule of music and news programs, 4:45 to 10:00 p.m. Frequency is 90.1 mc.

Report Card, a 1948 production of the CBS Documentary Unit, received a first award from the Education Writers Association as the outstanding radio or television program of 1948 dealing with education.

Dr. Paul F. Lazarfeld, well-known radio research expert, has been named chairman of the Department of Sociology in the Graduate Faculties of Columbia University. He will continue as associate director of the Bureau of Applied Social Research.

Dr. Lee de Forest, inventor of the audio tube on which modern radio depends, expressed the wish on his seventy-sixth birthday that the FCC would enforce its ban on "those mediocre give-away programs" and, while they are about it, slap one on soap operas, too.

The United Nations started last month two network series. NBC opened a six-week UN campaign in cooperation with the American Association of the United Nations and the National Education Association on September 4. CBS resumed its *Memo from Lake Success* on September 24.

Cavalcade returned to the air for its fifteenth season on August 30. Mountain and Pacific Coast stations, however, did not join this NBC network until September 27. These 30-minute historical dramas, widely used by schools, will be heard this year on Tuesday rather than Monday as in the past.

Edward M. Webster was confirmed during the past summer for a new seven-year term as member of the FCC.

Little Songs About UN, a set of "tolerance jingles," are being broadcast by some 1,000 radio stations in the United States.

Young Canada Listens, a 48-page 9x9-inch pamphlet, constitutes the new *Teachers Manual for School Broadcasts in Canada*, 1949-50.

Richard S. Milbauer, graduate student in political science, was awarded the H. V. Kaltenborn Radio Scholarship at the University of Wisconsin for 1949-50.

Jack Aistrop was appointed recently to the post of radio officer in the British Information Services, Press and Radio Division, New York. He replaces Willa Gray Martin, resigned.

An in-service training institute was held recently by the Long Beach, California, schools. It was one of the best of its kind, according to Mrs. Elizabeth E. Marshall, who served as consultant there in May.

The Association of Women Broadcasters, Ninth District, will hold its annual meeting in connection with the thirteenth annual School Broadcast Conference in Chicago, October 18-20. Mrs. Elizabeth E. Marshall, WBEZ-Chicago, is director.

The General Electric Company, Syracuse, New York, has a new illustrated brochure describing the establishment of FM radio centers in high schools and colleges. School officials may obtain a copy by writing Mrs. E. B. York, Advertising Division.

A Curricular Orientation Workshop, held in Chicago, June 27 to July 8, included group meetings on radio-television. Staff members of WBEZ were in charge of the group meetings which were scheduled from 9 a.m. to 4 p.m. daily. All major addresses were tape recorded for later use.

What Is the Future in Education of Television, Radio, and Films? was the topic of a panel discussion at the University of Southern California, July 12. One member of the panel was William Seiter, associate professor of radio and program director of Station KUSC, 91.5 megacycles.

George Jennings, AER President, addressed the annual Teachers Institute in Cedar Rapids, Iowa, August 25. A new radio series for fifth, sixth, and seventh grades began there with the opening of the new school year. Mr. Jennings was a guest of the Cedar Rapids Radio Council at luncheon.

The Illinois Congress of Parents and Teachers reports that during the past year over 350 radio chairmen were appointed throughout the state for fulltime radio work, coordinating home and school. Equipping the schools with radio, playback, and recording facilities is one of the immediate objectives. Mrs. Elizabeth E. Marshall, WBEZ-Chicago, serves as state radio chairman.

Wayne Coy, FCC chairman, is soon to accept the post as president of the Television Broadcasters Association, according to informed sources in Washington.

The Long Beach, California, public schools are constructing an FM station [KLLN, 88.1 megacycles] which should begin broadcasting by January 4, 1950.

Columbia University's School of General Studies, in cooperation with NBC, will present 25 courses in radio and TV during the current academic year.

Superintendent Douglas Newcomb and his staff have promised an article, "Long Beach Radio Story," for an early issue of the *AER Journal*. Here's a California setup well worth watching! You should see their studio plans! Welcome KLLN!

A School of Radio Instruction for the Illinois Congress of Parents and Teachers will be held concurrently with the thirteenth annual School Broadcast Conference in Chicago, October 18-20. The first such school, held last year, drew some 350 PTA radio chairmen.

NATIONAL OFFICERS

GEORGE JENNINGS, President, director, Chicago Radio Council, 228 N. La Salle St., Chicago 1.
JOHN C. CRABBE, First Vice-President, director of radio, College of the Pacific, Stockton, Cal.
KATHLEEN B. LARKIN, Second Vice-President, Rochester, New York.
GARLAND E. BRIDGEMAN, Secretary, radio education specialist, U. S. Office of Education, Washington 25, D. C.
BLANCKE H. HUNTER, Treasurer, radio consultant, Indianapolis public schools, 140 North Meridian Street, Indianapolis 6.

DIRECTORS AT LARGE

FRANKLIN DUNHAM, chief, Educational Use of Radio, U. S. Office of Education, Washington 25, D. C.
I. ALGER TYLER, director of radio education, Ohio State University, Columbus 10.
WILLIAM B. LAYENBACH, assistant superintendent of schools, Cleveland, Ohio.
KATHLEEN N. LARKIN, director, Station WDRB, Detroit public schools, Detroit 6.

REGIONAL PRESIDENTS

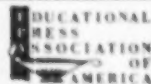
RUTH WEIR MILLER, Northwestern, educational director, Station WCAT, Philadelphia 3.
PARA LEE BROCK, Southeastern, director of education, Station WATL, Atlanta, Georgia.
MARGUERITE FLEMING, Great Lakes, consultant in radio, Board of Education, St. Louis 8.
RUSSELL PORTER, West Central, Department of Communications, University of Denver.
SHERMAN F. LAWTON, Southwestern, coordinator of radio, University of Oklahoma, Norman, Oklahoma.
JAMES MORRIS, Pacific Northwest, director, Station KJAC, Corvallis, Oregon.
JOHN C. CRABBE, Pacific Southwest, director of radio, College of the Pacific, Stockton, California.

ALPHA EPSILON RHO

The Association sponsors Alpha Epsilon Rho, an undergraduate professional fraternity in radio.
BETTY THOMAS GILLING, Executive Secretary, director, Minnesota School of the Air, University of Minnesota, Minneapolis 14.

AER JOURNAL STAFF

TRACY F. TYLER, Editor, University of Minnesota, Minneapolis 14.
VIRGINIA S. TYLER, Assistant to the Editor, 1544 Falkner St., St. Paul 5, Minnesota.
GEORGE JENNINGS, Business Manager, director, Chicago Radio Council.
A. L. CHAFMAN, University of Texas.
BELMONT FARLEY, National Education Association.
WILLIAM LADD, University of Washington.
WILLIAM R. SEWER, University of Southern California.
TRACY F. TYLER, University of Minnesota, Editorial Board.



The Journal of the AER, published monthly except June, July and August by the Association for Education by Radio, Association and Business Office: 228 North LaSalle Street, Chicago 1, Illinois. Editorial Office, to which all material for publication should be sent: 111 Northrup Memorial Auditorium, University of Minnesota, Minneapolis 14, Minnesota. The Journal of the AER goes to all members of the Association. Annual dues \$2, of which \$2 covers a year's subscription to the Journal of the AER. The payment of dues entitles a member to attend all meetings of the Association. In kind offers and to receive services. Send applications for membership to 228 North LaSalle Street, Chicago 1, Illinois. Advertising rate card sent on request. The Association assumes no responsibility for the point of view expressed in editorials or articles. Each must be judged on its own merits. Entered as second-class matter October 2, 1941, at the post office at Chicago, Illinois, under the act of March 3, 1879. The Association for Education by Radio is incorporated under the laws of the State of Illinois as a non-profit organization for the purpose of furthering the best interests of radio and education.

TRACY F. TYLER, Editor

VIRGINIA S. TYLER, Assistant to the Editor

GEORGE JENNINGS, Business Manager

Minnesota Experiments with Tape Recording

NEW DEVELOPMENTS, although they have simplified the problem of making it possible to use radio in every classroom in the United States—elementary and secondary—have not solved it. Now it appears that the last difficult hurdle has been removed. Not external factors, but the teacher herself, now holds the key.

Surveys of school radio use in the past have revealed that absence of satisfactory equipment, scheduling difficulties, teacher indifference or opposition, lack of broadcasts related to the curriculum, and inadequate information on the part of teachers concerning broadcasts suitable for school use have been the major factors which have served to prevent classroom radio use from becoming universal.

Actually, these five major obstacles can be grouped broadly into two: the teacher herself and scheduling difficulties.

The alert, forward-looking teacher who is convinced that teaching is a profession and not just a job will grasp the first opportunity to take one of the courses in school radio use now offered in many colleges of education and teachers colleges. This she can do during the regular school year in late afternoon or Saturday sessions or, if that is not feasible, by attending a summer term.

Through such a course the teacher will discover how to locate desirable programs and use them with maximum effectiveness. When she sees how many usable programs there are and how much they can contribute to educational objectives, she will approach her teaching responsibilities with new eagerness.

If there is no equipment available for use in her school, she will find ways to remedy that deficiency. If the school authorities will not provide radios and other auditory aids, PTAs, community organizations, or the proceeds of school programs will. Rather than be without a radio, some teachers have brought their own sets to school.

If there are no programs suitable for school use available from the station or stations serving her community, her radio course should have impressed her with the fact that listeners play an important part in determining the programs which radio stations present. She will find that a community aroused to the importance of school broadcasts can usually gain the cooperation of the stations in presenting such programs.

The elementary school is less likely to be bothered with scheduling problems. If a program suitable for the fourth grade is broadcast at eleven o'clock no serious difficulty is experienced in arranging classes so that fourth graders can listen at that hour.

Schools of the air in recent years have devoted much more time to elementary school broadcasts than they have to programs for the secondary schools. Scheduling difficulties seemed almost insurmountable and, as a consequence, programs planned for high schools seldom reached sizeable audiences. High school teachers not only wanted programs

at the right time of day but also at the right time of the year. If they taught more than one class in the same subject, they wanted every class in that subject to use the program. Then, too, they often wished a class to hear the program again.

This difficulty was overcome in some of the larger high schools by the use of disc recorders. In this way excellent libraries of programs which could be used year after year were developed. Unfortunately, this method was expensive, both in the initial cost of satisfactory recording equipment and in the purchase of the discs on which the recordings were made. Furthermore, making satisfactory disc recordings required great skill; discs deteriorated; and they could not be re-used.

Since the end of the war, there has been a substantial trend toward tape and wire recorders. These have been perfected to the point where machines capable of acceptable fidelity for school use can be purchased at prices ranging from \$125 to \$250. Furthermore, no great skill is required to operate them. Of even greater importance, tape and wire recordings do not lose quality with use and when any program has served its purpose the same tape or wire can be used to record another program.

The Minnesota State Department of Education believes that tape recordings are the coming development in surmounting the last barrier to school radio use. A substantial gift from an anonymous donor makes it possible for the Department to begin this fall to record on tape all programs deemed suitable for school use, provided proper clearance for such use can be secured. Staff members at the University of Minnesota are cooperating in the project.

One of the first important program sources to be tapped will be the University of Minnesota Radio Station KUOM with its School of the Air programs, documentary series such as *Tales of Minnesota*, and the like. Other radio stations serving the area are expected likewise to make important contributions. Programs in the files of the U. S. Office of Education, of other educational stations, and of the networks, constitute other sources.

At an early date Minnesota schools will be furnished with a preliminary catalog of available programs. All schools will then be able to secure recordings of any programs listed in the catalog by providing the Minnesota State Department of Education with the necessary rolls of tape. The actual recording, which will be of professional quality, will be done by the Department at no cost to the individual school.

This is a project which will be watched with interest by other states. It is one which may do more to promote school radio use than any single development in the radio field in the past twenty years. It is predicted that there will be a tape recorder in every graded school in Minnesota within a year. Here's wishing this pioneering project every success!

—TRACY F. TYLER, Editor.

The President's Page

TECHNOLOGICAL AIDS!—whoever foisted that tongue-twisting moniker upon things which are relatively simple, certainly must have been a pedagogue! Essentially, technological aids in the classroom need not be more confusing or difficult to use than the textbook, map, chart, or model, and, as experience with them grows, they become less technical, and consequently are adopted as standard classroom procedures.

Radio, film, records, playbacks, tape-recorders, disc-recorders, and now television are only means to an end; they are not ends in themselves, except in extremely rare and isolated instances. Any of these mechanical devices should be merely starting points—motivators, stimulators—they may be likened to signposts on the way, rather than the way itself.

In practice, particularly in our elementary schools, radio, transcriptions, and records have proven to be powerful teaching aids [note, we do not say "powerful teaching"]. To us, the teacher is still the most important person in the classroom and in the use of any and all technological aids. It is the teacher who guides, who integrates, who makes a unit of the material coming from the "mechanical-aid" with the activity, interests, intelligence, and experience of the students.

This cannot be done in the radio or recording studio; it cannot be done in the film studio. Good educational films and good educational radio and recordings can and do go a long way towards this goal, but in the end it is the teacher—the classroom teacher—who makes any material presented by a technological aid meaningful to his students—meaningful in the best sense of the word, and over a long span of time.

By meaningful, we mean that the material presented, with the aid of the teacher, becomes something more than what Whitehead calls "inert ideas"; it becomes an integral part of the student's entire learning process and his living and thinking process; meaningful, not for the present arithmetic or history lesson, but meaningful after school and after graduation.

It is in the middle elementary grades—the period that Whitehead calls "the stage of romance" that technological

aids and good teachers have an ideal opportunity to work with and for students. The stage of romance Whitehead defines as

... the stage of first apprehension; the subject-matter has the vividness of novelty; it holds within itself unexplored connections with possibilities half-disclosed by glimpses and half-concealed by the wealth of material. . . . Romantic emotion is essentially the excitement consequent on the transition from the bare facts to the first realizations of the import of their unexplored relationships.¹

This is the function of radio, of film, of television, of good records and transcriptions; the material has the vividness of novelty—it is more than bare facts. The teacher, working with the students, realizes the import of unexplored relationships. Technological aids are the starting point.

Clifton Fadiman, in "The Decline of Attention," *The Saturday Review of Literature*, August 6, 1949, writes:

In general, a successful, technically admirable attempt is made to attract the attention, without actually engaging it; to entertain rather than challenge.

This, then, becomes the function of the producer of materials for classroom use, including radio, film, and all other "technological aids"—to engage the attention of the listener or viewer, to challenge rather than to entertain. This doesn't mean a return to dull, dry, material. Rather, it means a re-evaluation of our material. A radio talk can be the most interesting form in which to present our immediate material, but that talk must challenge, must engage the attention; there was a time when almost all educational scripts were written in dialogue, under the mistaken notion that they were "dramatic"—i.e.:

ANNY: This is a butterfly.

JOAN: Yes, I see it is a butterfly.

There is still much of this type of "dramatic" writing extant in educational radio, just as there is still much heavy, ponderous "talk" being aired under the mistaken notion that it is "educational."

Today, the radio educationist is evaluating his material and determining from content the form it will take in presentation. We do not get involved in the techniques of "round-table discussion" if a simple interview will fulfill our objectives; we do not get involved in "vehicles"—usually a form

¹Alfred N. Whitehead, *The Aims of Education*. The Macmillan Company.

of "sugar-coating"—if straight-forward presentation fulfills our objectives; we do not use "dramatic-dialogue" which is dramatic only in the way it is spaced on the paper.

The responsibility for good use of these aids is jointly that of the classroom teacher and the producer—with one important middleman, namely, the faculty members in our teacher-training institutions. Here seems to be the "bottle-neck" in the utilization of modern teaching and learning aids. Film, radio, television, records, and transcriptions are "methodologies" and should be taught as such. They are not, except in a few instances, courses in themselves. The ideal presentation of methods of using technological aids is not in radio or visual education courses, but rather as an integral part of the English teacher's training in the teaching of English, the social studies teacher's training in the teaching of social studies, and so on. Granted, there is need for specialists in the production and presentation of technological aids, but there is a far greater need for the average English or social studies teacher to have some basic ideas as to their use in his special field.

Specialists in the field of radio education are coming to realize that "radio" or "visual" must no longer be considered as isolated subject areas; they are methods of teaching history, literature, languages. And the person who uses the aids in the classroom should be the prime consideration and responsibility of schools of education, not necessarily the administrators, producers, writers, and the others who, while essential in a technological aid program, are, like the programs or films they produce, merely catalysts and not the final result of the program.—GEORGE JENNINGS.

Members of the Executive Committee and the Board of Directors of the Association for Education by Radio will hold their semi-annual business meeting, Tuesday, October 18, 4:00 p.m., in the Sherman Hotel, Chicago.

The semi-annual Membership Meeting of the Association for Education by Radio will be held Wednesday, October 19, 4:30 p.m., in the Sherman Hotel, Chicago.

Radio Serves the Upper Grades

RADIO'S SPECIFIC CONTRIBUTIONS to the educational development of boys and girls in upper elementary grades can be gauged only by their relation to the general educational objectives. Too frequently, many people think of radio only in terms of its contribution to school subjectmatter—to arithmetic, spelling, history, geography, English, and so forth. They forget that school subjectmatter in itself is only a means to an end—child growth. Except as subjectmatter contributes to the general objectives of child growth and development, it is not important.

Various sets of desirable educational objectives have been set up by national and local school groups. All are stated in terms of desirable end products—child's life. One of the best known of these sets of educational objectives was presented by the Educational Policies Commission. This organization determined that the school's function was to promote in each child the following essential qualities in living: [1] self realization, [2] social competence, [3] economic efficiency, and [4] human relationship.

Boyd H. Bode in his thesis on *Fundamentals of Education* stated:

Present achievements become stepping-stones to further achievements; present appreciations prepare the way for further appreciations; and present growth gives capacity to further growth. To set up fixed, inclusive ends in itself is to ignore the fact that life is too varied, too expansive to observe such limits. Our horizon retreats as we proceed; our aims and ideals change with the changes in our environment and with our growth in intellectual stature. It is precisely in this progressive self expression, this enlargement of capacity, this continuous enrichment of experience that life finds its fulfillment and its sufficient excuse for being.

Radio's possible contribution to many of these educational objectives is apparent, particularly when radio is thought of as a means of gaining direct and indirect experiences. The influence of this instrument is beginning to be felt throughout our schools. Radio programs contribute to any or all the school objectives; with proper guidance they may be made to further in children the understanding and practice of desirable social relationships, development of habits of critical thinking, appreciation and desire for worth-while activities, command of common integrating knowledge and skills, development of sound

bodies and normal mental attitudes, development of ethical characters, and power to evaluate customs and institutions. Radio's contribution to some of these objectives is obvious; to others it is only indirect.

Radio Has Powerful Influence on Human Behavior—Through various methods of utilizing radio material, the teacher in upper grades guides the children to listen to the radio rather than merely to hear it. Anything that impresses the human mind through auditory acuity requires a three-fold expenditure of human energy. There is, first, the physical exertion of hearing; second, the mental exertion of listening; and finally, feeling or experiencing. It is with the last stage that we are most concerned, especially as it affects adolescent nature of children—children in upper grades of our elementary schools. The conveyance of information to adolescent groups of children is comparatively a simple matter. Far more important is the development of desirable attitudes. Psychologists tell us that attitudes do not always result from reasoning alone, or from accumulation of facts alone. The important thing is what the learner *does* with the facts. Brooks in his study of child psychology states that young people as well as adults do not always act according to what they know, but according to how they *feel* about what they know. Emotional drives, therefore, have a powerful influence on human behavior. In this area radio can be of great help to the teacher and pupil. For radio has learned to use drama and music, two parent forces for creating an emotional impact; for example, the NBC series *Here's to Youth* and the Canadian program *Crossroads of Youth*, both of which were dramatizations of juvenile problems based on actual case histories. They represent splendid examples of the emotional drive which can affect attitudes and consequent behavior patterns of boys and girls.

Radio Aids in Integrating the Learner's Experience—In general, radio has served to supplement and integrate child's activities in the school. When programs are properly selected in terms of the nature of the learner, his interests, and standards of learning, radio serves as an agent in the coordi-

nation of school and after-school activities. It helps in the development of relational thinking of the adolescent child, especially in the cause and effect aspect of learning. Such programs as *Let the Artist Speak*, sponsored by WBEZ, point out the effects of life in Latin America upon the resultant art forms with which children come in contact in their everyday living. In this manner radio substitutes first-hand enthusiasm and mastery for second-hand interest and self-digested information. In this manner radio serves as an aid in child's development in the areas of self realization and social competence.

Radio Lends Authority to Learning—Teachers cannot possibly be experts in every phase of the subjectmatter they teach. The mass of available information is multiplying constantly. The search for the best sources and the lack of time make it difficult for the teacher to explore all the available sources. Here, too, radio serves as a supplementary agent of learning. The occasional appearance of authority before a microphone, whose material is carefully planned in terms of interests and learning capacities of pupils of upper grades, can be of active assistance to teaching. For example, as authorities of contemporary life in civic, scientific, social, industrial, or educational fields deliver their message, they at once become members of the teaching staff.

As in the past, and more so in the present, school people have found many programs which lend authority to child's learning; among them, I include the following: *Ask the Scientist*, *Human Adventure*, *Journeys Behind the News*, and *Cavalcade of America*, to mention only a few. With due respect to radio's help in contributing authenticity and authority to learning, its success does not depend entirely upon microphone appearance of a specialist. Several dramatic programs have been of real significance to the children in upper grades because they combined the fruits of a research staff with the talents of a dramatic cast. In this manner children derived more *clear* impressions of the central theme is the lesson. In this respect, Thorndike's Law of Learning in terms satisfying effect is realized by the child.

Radio Enriches School Experiences in Upper Grades—Usually children are limited to textbook experiences in their school activities. Supplementary materials are sometimes used to buttress the child's powers of perception in learning value judgments. In this respect radio's specific benefits lie in the contribution it makes to the studies already going on in the classroom. Radio presents and interprets the events while they are still current before they become history, whereas textbooks and magazines cannot. The chief benefit of this service to children is found in the timeliness which creates on the child's mind immediate awareness of the problem. This type of program stimulates new interest and frequently leads into other desirable activities. Manifestly radio's greatest contribution to school life lies in this area because it stimulates many new interests and at the same time it helps to increase the intensity of existing interests. In this respect, we find radio valuable to educational experiences of children.

Moreover, school radio may present new materials which in all probability would not otherwise be available—dramatization of a national event, for example. Radio also presents old familiar material in new forms. This new method of presentation may suggest to the child in upper grades a new interpretation and new feeling for all information and a possible new kind of wholesome activity for him to follow.

Radio Serves Upper Grade Pupils in Training for Critical Thinking, Value Judgments, and Social Competence

By and large school radio can be utilized for gaining various points of view to better advantage than any other school instrument except, perhaps a number of different newspapers. In general, children are limited, in studying controversial issues, to the viewpoint expressed in their textbooks, by the teacher, or evident behavior patterns of the community. By following radio programs on some given subject, for example, "price control," the pupils are likely to hear a variety of viewpoints and attitudes. Such programs as *Town Meeting of the Air*, *University of Chicago Round Table*, and *The Reviewing Stand* can be utilized to help develop the scientific attitude—mainly withholding judgment until all available evidence is critically evaluated and studied. Children should learn to judge

and evaluate evidence in order to become competent in their civic, social, and economic responsibilities as future adults to whom we entrust our American heritage and ideals of life.

Radio Leads to Creative Experiences—Some school people are led to believe that listening to a radio program by children in upper grades may lead to thwarting children's creative expression. They say that "passivity" of listening to a radio program destroys child activity. Examination of evidence collected by the Radio Research Bureau, Teachers College, Columbia University, refutes this contention. Hundreds of examples of creative work, stimulated through radio listening, controvert this opinion.

One of the most interesting results of school use of radio has been in stimulation to further effort on the part of child listeners. This further effort frequently manifests itself in questions raised by the program—questions that can be answered only through further study. Radio programs may stimulate an effort toward original and creative prose, drawing, construction, and sculpture.

The American School of the Air early recognized the desire of children to extend their radio listening into further work of their own. It offered prizes for the best creative work. Hundreds of samples of children's work were received in reply to these incentives.

Then, too, Mr. Damrosch received many unsolicited examples of creative work stimulated by the Music Appreciation Hour.

It is apparent that radio helps to set off children's urge in the field of creative expression. A "something" is suggested to the child listener who finds an outlet for creative expression. Radio offers this stimulus in a remarkable fashion.

Radio Supports and Augments a Program of Self Realization

Through experimentation, many teachers have found that radio programs listed under one subject may lead in utilization for work in another subject. A history dramatization for instance, may lead to oral discussion and thus lead to a lesson in English; a music program may contribute to the study of a country and its people, thus we have a lesson in social studies, or a health program may fit into a unit in science.

Discussion is only one method of

follow up and does not necessarily have to be a class discussion. It may take place on the playground, or during another class period. One child may be stimulated to write a poem; another may write a story about the program; and another may draw a picture to illustrate the broadcast.

One of the most popular and valuable school radio services to the children in the upper grades lies in the field of current events. Frequently new programs fit exceedingly well into existing curricula and more frequently they lead pupils to critical judgments, unfold their new interests, and sometimes induce them to explore new information.

Such activities as writing for the school newspaper on the news items heard over the radio, taking notes on radio news items, reading for further information, and giving individual reports on further reading suggested by radio news items, lead to the following learning outcomes:

- (1) Practice in written and oral composition.
- (2) Practice in selection and organization of material.
- (3) Practice in answering questions raised by other members in the class, and
- (4) Practice in critical evaluation of sources.

Thus, the aim of the educational broadcast is, first of all, to assist in the general process of education. Few of its proponents will offer broadcasting as a substitute for regular classroom instruction. Manifestly, radio cannot be substituted for the teacher, the schoolhouse, and the regular routine of formal school study. Radio programs are merely complementary—they are, in their present field of operation, an assistant teacher to children in upper grades. The children like it because of additional variety and the novelty it affords—yes, they like radio because it presents a touch of excitement, it adds freshness to their lesson, and opens a very interesting world to their view. That is why radio serves as an assistant teacher to all children.—T. J. LUBERKA, district superintendent, Chicago public schools.

The Annual Association for Education by Radio-School Broadcast Conference Luncheon will be held Wednesday, October 19, 12:00 noon, in the Sherman Hotel, Chicago. Dr. Benjamin Fine, education editor, *New York Times*, will speak on the subject, "The Crisis in American Education."

Radio Education in Germany

This is the second in a series of articles on radio education in various countries of Europe. The author has just returned from a trip which made it possible for him to study the status and methods of broadcasting in thirteen countries.

WITH THE TURNOVER OF RADIO STUTTGART to German management the last of June, another concession to German self-government was permitted, and one of the major tasks of the U. S. occupation in the information field went into its final phase.

Independent community radio has now been established in every land in the U. S. zone. The Americans are the first of the four occupying powers to give the Germans back control of their own stations. American radio officers, who until the turnover had supervised the stations, remain as consultants and observers.

Under the supervision of the American Military Government each land has adopted a radio law which sets up a public radio council, representing educational, cultural, labor and agricultural interests, to be responsible for broadcasting. For the first time in history, German radio is not owned by the state or the government. Each station is now a form of corporation of public law, vesting the ownership in the people.

U. S. officials have done a splendid job of planning and executing a program for education by radio. It is interesting to note, however, that this is not a recent development in Germany. The Weimar Republic allowed a generous amount of air time for Schulfunk [educational radio]; offered guidance and advice to teachers; and cooperated closely with local school authorities. Soon after the Nazis took over the government, however, educational programs were stopped and political propaganda was substituted.

Radio Stuttgart broadcast the first postwar educational program in the U. S. occupied area on December 12, 1945. From the beginning, the major problem was to find enough radios for use in the classrooms. Some children brought sets from home, and the military government bought 1,000 radios

from The Netherlands for the schools. Now that things are better organized, German firms are turning out sets suitable for school use.

Another difficulty was the complete lack of teacher training in the field of educational radio. However, the radio stations and the ministries of education cooperated in inaugurating in-service radio institutes. From time to time leading radio educators were brought from the U. S. as visiting experts. Each station now has a separate educational section with its own staff.

Scripts for Radio Stuttgart's broadcasts are specifically prepared to cover subjectmatter used in the classroom, and they reach over 60,000 students in Württemberg-Baden. Radio Frankfurt, the second station to establish a radio education department, has an advisory committee representing all the schools of Hesse, and this committee acts as a contact between the Ministry of Culture, the station, and the listeners. Station staff members regularly tour the schools to check the effectiveness of the broadcasts and to make helpful suggestions.

Radio Munich submits programs to a large group of Bavarian teachers for recommendation. This station, one of the best managed in the zone, took the lead in exchanging programs with educational stations in the United States. Radio Bremen started educational broadcasts as such early in 1947 when a survey showed that 40 per cent of the schools in the state of Bremen had radio receiving sets.

Unlike the other stations, RIAS, the U. S. built radio station in Berlin, will remain under the direct control of the Military Government. RIAS [Radio in American Sector], which is on the air 21½ hours per day, regularly devotes over 50 hours a month to school broadcasts and is in many ways unique in its scope and methods of handling educational programs.

Like the other stations RIAS attempts to supplement the work of the teacher, rather than substitute for him. All Berlin schools, even those in the Soviet sector, listen to RIAS programs and cooperate in their planning. The Schulfunk staff regularly consults an advisory committee composed of headmasters and teachers. Recordings are

made of these sessions and are broadcast in a series called *Teacher's Hour*. A student is also selected from each school to present criticisms and suggestions from the point of view of the pupils.

Each individual broadcast is presented to a different school class for preview before it is aired. Incidentally, I found a preference throughout Germany for tape-recordings instead of live programs. Perhaps this is part of a play-safe policy.

Another interesting example of student participation is the RIAS school parliament, consisting of pupils from the senior classes of the schools who meet regularly, choosing discussion topics and their own chairman with invited speakers. Pen-friendships between German and American boys and girls are encouraged, literature not available for use in schools is discussed, and choral competition and music listening groups are organized. Student reporters go on the air to tell news from their schools. Funds are raised for needy children, and last winter even the animals in the Berlin Zoo were saved from starvation by student radio appeals for the collection of acorns and chestnuts.

Since RIAS is the main U. S. outlet in the iron-curtain country, it is also enabling Russian teachers and students to learn something of American academic freedoms and methods. Even though German radio educators continue to need guidance and assistance, they are headed in the direction of democratic reorientation of Germany. —JOE A. CALLAWAY, director of radio education, Michigan State College.

Your President, Editor, and Secretary have been in correspondence with the Federal Communications Commission, relative to the UHF-TV hearings which opened September 26. Time has been requested by the AER [in conjunction with NAEB and other educational groups] to present the case for the allocation of TV bands for educational purposes in any re-allocation of bands which may be made. When and if something more definite grows out of this request, the membership will be informed through the pages of the *Journal*.

Methods of Teaching the Radio Language Course

This is the second in a series of three articles on the broadcasting of foreign language lessons. The first, "Planning the Radio Language Course," appeared in the September issue. The final installment will appear in November.

THE BASIC PRINCIPLES OF TEACHING are the same whether in the classroom or over the radio. Such fundamental concepts as interest and self-activity are important in any teaching situation. But the precise situation is different, and the techniques of teaching are therefore not completely the same.

There are several important differences between the radio class and the regular class. In the former, it is a question of only the teacher and the student; in the latter, in addition to the teacher and student, there are the other members of the class. In the radio class, the student does not see the teacher, and the teacher does not hear the responses of the student.

Over the radio, the personality of the teacher is entirely auditory. The instructor must take care that the audio-impressions are as pleasing and effective as possible. In the radio class, the student derives no instructional value from the work of other members of the class, but neither is he obliged to hear the errors of other students. In many ways, the radio class resembles a private lesson. It is much more difficult to affect pupil activity in the radio class. The instructor must organize and encourage it strongly and must provide somehow to correct errors of the students.

The ideal radio language course interests and stimulates the adult learner both by developing the linguistic skills he desires and by taking him out of the hum-drum routine of everyday monotony by increasing his knowledge and understanding of the people who speak the language he is learning.

The principles of language teaching, also applicable in the ordinary classroom, are of special importance in the radio language class.

[1] Spend a maximum of time during the radio class hour doing for the student what he cannot do for himself outside of class and a minimum of time going over what the student can and will do for himself if properly motivated. For instance, pronunciation and comprehension drills are indispensable, since the language learner cannot get those outside

the class hour. On the other hand, grammar explanations and foreign-language-to-English translation are to be avoided, the former because the student can read such matters in his textbook, the latter because he can do elementary translation by himself.

[2] Plan each hour with as much pupil activity as possible and organize the course so that the pupil will have some homework in preparation for each hour. By pupil-activity over the radio we mean pupil repetition of the instructor's pronunciation, dictation, etc. The homework should probably not exceed what can be done in one half hour.

[3] Establish a regular procedure of taking up the lessons in the text, so that the students will know how to prepare and will have the assurance that the day's work will be covered during the radio hour.

[4] Introduce as much variety as possible into the regular procedure so that the radio hour never becomes dull.

[5] Enrich each hour with a few minutes of something that is not in the textbook.

[6] Choose activities which contribute most to learning and continue each activity only as long as it retains the pupils' active interest. There is no place on the air for a teacher who wanders aimlessly from the lesson nor for one who overindulges in some pet hobby such as word-derivation.

[7] Repeat constantly in the foreign language whenever it is a question of developing skills such as comprehension and pronunciation.

[8] Proceed slowly from the known to the unknown, so that the student may follow readily and at no point become discouraged and drop the course. In case of doubt, spend a longer rather than a shorter time on a given portion of the lesson.

How to Conduct the Course—

What the instructor does during the class period will depend largely on what he wants to accomplish and on the texts he has at his disposal. The nature of the language he is teaching also influences his activities.

In general, the four traditional linguistic skills—the ability to [1] read, [2] understand, [3] speak, and [4] write the language—will be developed in the radio class as they are in the regular class, but in such a way and through such media as will appeal to the alert adult mind through meaningful subjectmatter.

The organization of the lesson in the textbook determines to a large extent the order of activities during the class hour. Lessons of most elementary language textbooks consist of: [1] a reading selection which illustrates new grammatical principles and introduces new vocabulary; [2] questions on the lesson in the foreign language; [3] exercises entailing the use of new vocabulary and new grammatical principles; and [4] explanation in English of the grammar taken up in the lesson.

The Reading Selection—The reading selection [not the grammar] is the real center of each lesson. It offers the greatest possibilities for varied activity in taking up the lesson and on its effectiveness and effective presentation more than anything else depends the rate at which the student will progress in his ability to attain the desired skills.

If several days are used to cover a single lesson, the reading selection can be used for a different purpose each day. It may be used to develop a number of skills: silent reading, pronunciation, aural comprehension, cultural appreciation. It will serve as the basis of many of the dictations.

The reading selection of an elementary textbook must not be translated for radio pupils. To spend time translating what the students have already read is to waste time that could be used for work in the foreign language and to bore the class with something devoid of interest. However, any particular sentence or phrase which offers difficulty may and should be translated incidentally during one of the readings of the reading selection.

Questions on the Text—Most elementary texts have a series of questions on each reading selection in the foreign language. In assigning these questions, it is well to encourage those who have never had the language before to copy the questions and write the answers in complete sentences. They should then go over the questions until the answers can be given automatically and rapidly without reference to the written copy. In that way, listeners will build up some ability to speak.

During the class period, the instructor reads the question slowly and answers it slowly, covering all the questions in this way. He then goes over the entire exercise once more, this time reading the questions and answering them more rapidly.

Questions and answers form the basis of effective dialog between the instructor and a native. Recordings of questions and answers made by two natives, especially where one is a man, the other a woman, are of great value.

Checking Exercises—The checking of exercises is a mechanical operation which must be done in order to afford the students an opportunity to

see if they have been able to work out the exercises correctly. This should be done as quickly as possible so as to leave more time for more interesting activities. This is especially true because the listeners who do not have a book will derive little profit from the correction of the exercises which they have necessarily not worked out.

Blank-filling exercises can be taken rapidly, for the instructor can simply read the word to be filled in, spelling the form where it seems necessary. A sentence or two of explanation to enforce the background of grammar already discussed may not be amiss, but it would be a mistake to go into long grammatical explanations at this point.

Exercises involving changes of word order, as, for instance, in substituting pronoun-objects for noun-objects, are harder to read, for the word order must be indicated.

The English-to-foreign-language translation presents a special problem, for there are often variants. In order not to consume an undue amount of time in checking this exercise, the instructor may simply read the most common correct form of the translation with a variant here and there. He can spell certain important words or forms.

Grammar—A knowledge of the basic grammar of a foreign language is important to anyone learning it. However, to the majority of language students grammar is the least interesting of all linguistic activities, and the radio instructor may well consider these two facts when he plans his grammatical activities in the language course: [1] the really essential facts of grammar—those which must be known by the student in order to get along—may be reduced to a very few, such as the present and past tenses of the verb, simple agreements, etc.; [2] every moment spent over the air reiterating grammatical principles the student has already read in his text takes time from more interesting and profitable linguistic activities which the instructor must give the student.

With a textbook in which the grammar of the foreign language is clearly explained, the amount of time spent on grammatical explanation during the radio hour can and should be reduced to a minimum. The instructor may spend a few minutes going over the most essential and most difficult points of the new grammatical principles before going over the exercises. Then,

while giving the solution to the exercises, he may add a word of explanation here and there so as to clarify grammatical points to the student.

Long grammar explanations are boring. A radio language instructor who indulges in them risks losing his audience.

Comprehension—The development of the ability to comprehend the foreign language is one of the most attainable aims of the radio language course. Comprehension drill may well make up a large part of each radio hour. The importance of repetition and more repetition is paramount. It is vital, also, that the class remain on a given lesson until everyone understands it. New material must be carefully graduated so that at no time do members of the class feel themselves completely lost in a selection which they do not understand or which they cannot learn to understand. In early stages of the course, only familiar material should be used. Later, outside material with a vocabulary similar to that already possessed by the students can be introduced gradually.

Comprehension exercises center around the reading selection and the questions of the lesson. If four days are spent on a given lesson, the class can well hear the reading selection read no less than twice each day. It should be read slowly at first, then more rapidly. If possible, it should be read by natives as well as by the American instructor. An ideal arrangement is to have recordings of the reading selection made by several natives. These recordings can then be played at appropriate intervals while the lesson is being studied. The questions on the lesson also form a medium for developing comprehension. Their value is also enhanced when recordings of dialogs by natives are used.

Comprehension reviews are valuable. When the class is studying Lesson 10, the instructor may reread Lesson 3 or play a recording of Lesson 5 made by a native. Radio students welcome this type of review, for it encourages them, especially if they are having some difficulty in understanding the current lesson.

As the class becomes more advanced, the instructor can slowly introduce new material in the foreign language. Anecdotes are always interesting. A newspaper article would stimulate the students if its vocabulary was within their grasp. Side comments on the lesson material made in the foreign language

also prove of interest. The instructor must have a fine feeling for just how much English explanation should be added to keep the student aware of what is going on.

The surest way to learn whether the members of the class are understanding is to encourage them to write in their comments on the progress they are making in comprehension.

Pronunciation—Pronunciation is an important aspect of any beginning language course, and the possibilities for auditory training over the air make the radio an especially effective medium for training in pronunciation.

However, the beginning radio language class is no place for a course in phonetics. Long drills on pronunciation of sounds and especially minute descriptions of the placing of the speech organs to make certain sounds are not activities which will engross the attention of the casual learner. In fact, if the interest of the audience is to be held, pronunciation drill must be only a part of the lesson and never, even at the very beginning, the principal activity of the hour.

There will be greater interest and more learning will take place if the sounds of the language are taught in words the student knows. To present the student at the outset of the course with a list of words he has never seen before is a waste of time. It is advisable to spend no time at all on pronunciation before the first regular lesson of the book, but the first lesson may be used as a point of departure for some pronunciation drill.

Since the student cannot be corrected directly, greatest emphasis should be placed on sounds that a learner is likely to mispronounce and those which do not exist in English. These the instructor should repeat again and again.

Special attention should be given to intonation. By pointing out where the voice rises and falls, the audience becomes aware little by little of what to strive for in intonation.

Each lesson may be introduced by a short exercise on pronouncing the vocabulary of the lesson. This may be followed by pronouncing the entire reading selection by word-groups. During this activity, the instructor may call the attention of the students to peculiarities of pronunciation.

The teacher may occasionally take to the station with him a student to read and to be corrected over the air. This

shows the audience what, in its own pronunciation, needs to be watched. However, radio students do not appreciate hearing a language badly pronounced, and this device should be used sparingly.

Dictation—In many ways, dictation is the most complete linguistic exercise. It obliges the student to use his ears to hear the language, his eyes to see it, and his hands to write it. He involuntarily pronounces the language while writing the dictation. In putting down the forms, he is obliged to think of grammatical relations in order to spell correctly.

Dictation is a good way to end a radio language class. There are several reasons for placing it at the end of the hour. First of all, pupils tend to check their dictation after they have taken it; secondly, it is best to have this sort of

activity after they have listened and are tired of listening.

Sentences should be dictated as far as possible as entire units and at a normal speaking speed, but they should be repeated often enough so that the student has no trouble knowing what to write. It is a good practice to allow a short interval between the first and second reading of a sentence during which the student repeats the sentence.

Over the radio, it is best to dictate material which is exactly that which is in the text, in order that the student may correct it immediately after the dictation. The instructor can vary his dictation, taking part of it from the reading selection, part from the questions, and part from the exercises.

Recordings—It would be ideal to

*For a detailed study of the use of records, see Walter Meides, "The Use of Recordings in the Radio Language Course," *Modern Language Journal*, April, 1949.

bring to the radio station several natives for each lesson, but inasmuch as such an arrangement is not practical, much the same result may be obtained by having sets of recordings of the reading selections and of questions and answers on those selections made by four or five natives. It is highly desirable to have both men and women make these recordings and to have speakers from various parts of the country.

After the instructor has worked over the lesson with the students and read it to them himself, he may play the slowest recording of the lesson. Then, on following days, various other recordings of the lesson may be played, until the radio student understands the lesson when it is read either by the instructor or by one of the native voices.

—WALTER MEIDES, assistant professor of Romance languages, Ohio State University.

Educational Stations of the Nation—WCAL

IMMEDIATELY AFTER THE 1918 ARMISTICE the Physics Department of St. Olaf College built and began operating an amateur phone station with the call letters 9AMH. This began the radio activities at St. Olaf College, which have continued without interruption. In May, 1922, the first standard broadcast license was issued to the college with the call letters WCAL.

The station has grown steadily throughout the years, although its history is not entirely peaceful and without exciting incidents. For the past twelve years the station has shared a daytime channel [770 kc.] with the University of Minnesota station, KUOM. WCAL has one-third of the week-day time and all Sunday time, as the result of a Commission hearing in April, 1937. Previous to that time, the station had broadcast with unlimited time; shared time with one, then two, and finally three other stations. In 1936 the station was on such a restricted schedule that it broadcast only nine and one-fourth hours a week. The 1937 decision gave WCAL approximately forty hours a week of operation. The bulk of this time is between 6 a.m. and 10:30 a.m. every week day morning. This is not a favorable time for classroom broadcasting, so most of the educational activities of the station are in the field of

informal adult education. A thirty-minute farm hour is broadcast each morning, beginning at 6:15. A one hour program of time, temperature, news, and music has been a long-time feature of the station, which has met with a great deal of favorable response.

The program schedule of WCAL differs considerably from that of the usual educational station in that St. Olaf College is a denominational, liberal arts college, and the station operates a full Sunday schedule which includes church services from two churches. In addition, two church services in foreign languages are broadcast from the studio. A check of the program schedule reveals that approximately 10 per cent of the time is devoted to education, 15 per cent to news and news commentaries, 10 per cent to discussion groups [forum, panel, and round table programs], 7 per cent to general talk programs including sports, 8 per cent to agricultural programs, 25 per cent to entertainment, and 25 per cent to religion.

On April 10, 1949, WCAL was joined by WCAL-FM. WCAL-FM operates on channel 239, frequency 95.7 megacycles, with an effective radiated power of 49,000 watts at a height of 414 feet above average terrain. The station operates seventeen hours a day from 6 a.m. to 11 p.m.

The radio committee of St. Olaf Col-

lege studied very carefully the problem of costs for operating WCAL-FM, and it was finally, although reluctantly, agreed that the budget of the college and the support of listeners would be insufficient to meet the financial requirements of the station. It was therefore decided to operate on a limited commercial basis, accepting advertising from carefully selected clients. This the station does.

With the additional time made available through full-time operation, WCAL-FM is able to broadcast a number of courses from the college classroom, as well as an increased number of informal adult education programs. WCAL and WCAL-FM have not entered the field of broadcasting to the classroom, having left this field somewhat exclusively to the University of Minnesota, which is in a better position to conduct such broadcasts. A great deal of very fine music is broadcast each day, most of it carefully annotated, and some of it with scarcely any announcement. Two of the most popular programs are: the station-originated *Music of the Masters* program and the transcribed *Deems Taylor Show*. Approximately thirty hours a week are duplicated programs on WCAL-AM. The other ninety hours are FM only.

The physical plant of WCAL has grown throughout the years. The first transmitter was operated in one of the

physics laboratories. Subsequently, the transmitter was moved to an open area beyond the athletic field and a small frame building was provided for the transmitting equipment. The studios were located in the gymnasium. From 1926 to 1938 the main studios were located in the Administration Building in rather cramped quarters. In 1939 the first major WCAL building was erected. Constructed of native limestone and reinforced concrete, the building conforms to the Gothic architecture of the other campus buildings. This unit contains a small auditorium studio with stage to accommodate band, orchestra, and choir groups, and is equipped with a splendid three-manual pipe organ. The auditorium seats something over 250 people. A smaller general purpose studio is used for smaller groups and solo performers. A third studio is used for spoken programs, talks, forums, and roundtables. There is a large news room, and a small, though serviceable, lobby. Three private offices and a general secretarial office are grouped in one end of the building. A sub-controlroom for the auditorium studio, a music storeroom, and a band instrument storage room complete the first floor of this building. In the basement, air conditioning equipment, a workshop, a storeroom for office supplies and records, a stockroom for repair and maintenance parts are located.

In 1947 an addition was made to the building which houses on the first floor a transmitter room, the master controlroom, two studios, and a sub-controlroom. Due to a lack of funds the two studios in this addition have not been acoustically treated and are not in use at the present time. In the basement of the addition there is a transformer vault, a room for auxiliary transmitter equipment and air conditioning equipment, an amplifier rack room for the master control, two private offices, a record and transcription library, and a large continuity and script-writing room. The studios are all of Johns-Manville Floating construction equipped with RCA Type 44 and Type 77 C or D microphones. The sub-controlroom uses an RCA console with Rek-O-Kut dual turntables with Western Electric 9A reproducers. The master controlroom is equipped with Western Electric equipment and also contains two RCA turntables and Scully recording equipment. The AM and FM transmitters

are both located in the same room directly across a corridor from master control. The AM transmitter is a 10 kw. Westinghouse Type 10HV-1 [operated with 5 kw. output]. The FM transmitter is a 10 kw. Westinghouse Type FM-10. General Radio frequency and modulation monitors are employed for both AM and FM. The transmitter room racks also hold a General Radio oscillator and distortion measurement equipment, limiting amplifiers, monitoring amplifiers, and radio receivers. The transmitters are controlled from a control desk located near the center of the room.

Overhead transmission lines bring the output of the transmitters to the antenna located approximately 300 feet from the building. The AM antenna is a self-supporting tower, 270 feet high, with the 54 foot FM pylon antenna mounted on top for an over-all height of 324 feet. The physical plant has an inventory value of approximately one-quarter million dollars.

St. Olaf College is a liberal arts, denominational college and is not tax supported. For a number of years the college supported the radio activity as an adult education program, but the cost finally rose to such an extent that the college did not feel justified in diverting funds for the complete support of the station and private gifts were sought for its support. Since approximately 1930 private gifts have been the principal source of income for the station. With the increased hours of operation made available through FM, the management felt that gifts might not be able to support the operation of the

station and it was therefore decided that the FM station would engage in a limited amount of commercial work, sufficient to balance the budget. Selling time on FM is not as easy as selling time on AM, and there is some question as to whether the station will operate on a balanced budget this first year.

The management of WCAL is keenly aware of its obligations to the listening public and its local community as well as the surrounding region. It is much more than a local station. Its support comes from virtually the entire state of Minnesota, northern Iowa, and west central Wisconsin. The list of people who contributed to the support of the station at one time numbered more than 50,000. In recent years the number of contributors has decreased somewhat, but the average gift is larger. The aim of the management at all times has been to operate in the public interest, convenience, and necessity, and any promotion of the college has come about through the good will created by the service performed, rather than through any specific planning or programming toward that end.

The station is directed by a Radio Board whose members are drawn from the Executive Committee of the college administration, plus the public relations director of the college and the station manager. The direct supervision and the responsibility of the operation of the station is handled by the station's operations director. Full-time program director, promotion director, and production director carry the bulk of the responsible detail work. The present staff consists of nine full-time em-



This building houses the studios, transmitters, controlrooms, and offices of Stations WCAL and WCAL-FM in Northfield, Minnesota. Additional studios are located in the Augsburg Publishing House, Minneapolis, and the Luther Seminary, St. Paul.

employees, plus fifteen students. The number of student employees varies from time to time.

Being a liberal arts college, there is ample student personnel in the program and production end of operations, but the engineering staff is frequently

a little short since no engineering students are available to draw from. The station operates in close cooperation with the Speech Department and offers facilities and space for a student workshop and a radio guild. A director of the workshop and the guild is a faculty

member from the department of spoken English, and the announcing, script writing, and production personnel of the station are largely chosen from the advanced students in this department. —MILFORD C. JENSEN, operations director, Station WCAL.

College Radio Workshops—A Survey

A SURVEY COMPLETED RECENTLY at Boston University attempted to determine the common elements found in college radio workshops. Approximately 75 workshops in 42 states supplied information.

For the purposes of the study a radio workshop was defined as "an organized college activity available to students interested in the study and production of radio programs." In the use of the term no distinction was made between extra-curricular workshops and those offered for academic credit. Five general elements in the workshop picture were considered: [1] qualifications for admission; [2] types and nature of equipment; [3] listening outlets for broadcasts; [4] time of workshop meetings; and [5] disposition of profits from sponsored productions.

Qualifications for Admission—One of the most serious problems a college radio workshop faces is the selection of students. The activities of the class are so diversified and require so much initiative and innate talent that it hardly seems feasible to open the workshop to all who are sufficiently interested to register.

Nevertheless, out of 71 replies, 32 reported the only qualifications were interest in radio and in the course. The permission of the instructor was necessary in 5 cases; prerequisite courses in speech, drama, and radio existed in 8; and auditions and combinations of the above accounted for 6 more. Four workshops reported an additional prior grade requirement, and 5 possessed varied, extensive requirements, including previous courses, ability as determined by audition, and permission of the instructor. Credit and non-credit workshops were grouped together in these figures.

Informal workshops, such as those which exist for the promotion of general radio work and small campus stations, invariably operated with only expressed interest as a membership prerequisite. An attempt to organize a

central campus station which would feed programs to member groups in New England is to be made this fall by interested students at Emerson, Harvard, Wellesley, Radcliffe, Rhode Island State College, Tufts, and Massachusetts Institute of Technology. Membership on the staff of this station, if it becomes a reality, would be a matter of expressed enthusiasm for the project.

Types and Nature of Equipment—

There is a popular conception that most college radio training studios are poorly equipped. To check on this belief, colleges were asked to list briefly the equipment in daily use. Sixty-eight colleges gave information.

One fact should be noted: Several universities and colleges now have educational FM or AM stations and in most cases the same equipment is used for classes; other colleges have campus stations which loan equipment to classes. A three-way classification is therefore necessary to give a true equipment picture. Answers to questionnaires were tabulated, the number of specific instruments were totaled individually, and the total divided by the number of colleges. The results are shown in the accompanying table.

Five colleges and universities included in the survey had a rather bright equipment picture. The College of the Pacific, University of Denver, Wheaton

College, Ohio University, and University of Oklahoma.

Several institutions gave trade names on equipment. Among others there were listed 13 Brush tape recorders; 3 RCA tape recorders; 1 Pierce wire recorder; 3 Sears Roebuck wire recorders; and 4 Presto 8-D portable disc recorders. Two colleges reported they preferred the Wilcox Gay tape recorder for workshop over all other types, including disc.

Listening Outlets for Broadcasts

—The number of types of outlets through which workshops released programs were as follows:

Commercial stations only	27
Commercial stations and campus wire-radiation stations	4
Commercial stations and campus radiation stations	4
Commercial stations and campus wire stations	2
Commercial stations and college-owned commercial stations	2
Commercial stations and public address systems	1
Commercial stations, educational commercial station, and campus wire-radiation station	1
Commercial stations, educational commercial station, and campus radiation station	2
College-owned commercial stations only	3
College-owned non-commercial stations only	8
College-owned non-commercial station and campus radiation station	2
Combinations of the above	7

Four types of shows appeared to lead in popularity. Dramatic programs, live

EQUIPMENT AVAILABLE IN THE AVERAGE COLLEGE WORKSHOP

	Having AM or FM Stations	Having Campus Stations	Having No Station
Number of colleges reporting	8	17	43*
Home-made consoles	1	1	1+
Professional type consoles	2	0+	1+
Microphones	7+	3+	1+
Portable recorders, disc	1	1—	3+
Portable recorders, wire	0*	1+	2+
Portable recorders, tape	1—	1—	2+
Playbacks, 33 1/3 rpm	0	2+	0
Playbacks, 78 rpm	4	3	0
Playbacks, dual speed	0	0	3+
Remote mixers	1+	1—	0

*One station uses 2 Webster wire recorders.
+13 stations had classroom studios.

and canned music shows, educational talks and round tables, and special events on college activities were the types released most often to air outlets. College news, children's programs, and agricultural programs were also listed. One workshop was producing and writing television shows.

Time of Workshop Meetings—Is it better to have several short workshop meetings a week, or to have one extended meeting during the week? The question of length and frequency of workshop meeting time is an important one. When Boston University's workshop was organized two years ago the schedule called for two meetings a week. Students complained they just started on projects in the time allotted and then had to stop at the end of the hour. However, when the workshop time was extended in one section to one meeting of four hours, students had a tendency to "drift" out of sight and lose interest, claiming they could not sustain enthusiasm for more than two or three hours.

Workshops included in the survey were polled to determine whether they met once a week in a solid block of time or whether their activities were conducted on a scattered basis. The results:

Several short meetings [not over 2 hours each]	46%
One long period a week [approximately 3-4 hours]	4%
One long period a week with extra rehearsal time	15%
Miscellaneous	3%

All of the 46 had three 2-hour meetings a week. No one did a workshop meet for more than 4 hours at one time. Average meeting time was 2 hours once a week.

The Oregon State College Workshop meets 2 days a week with periods lasting 45 minutes each. West Virginia University's workshop meets Monday through Thursday from 5 to 9 p.m. This is an extra-curricular workshop.

Central State Teachers College, Stevens Point, Wisconsin, reports its workshop meets 2 days a week from 5 to 8 p.m.

Profits from Sponsored Workshop Productions—Are students on sponsored programs paid for their efforts? Sixty-seven out of 74 reporting workshops reported it was not their policy to have sponsored programs. Profits from sponsored shows at 4 colleges went directly into studio equipment funds. Only in 2 cases did students actually share in the money collected. This points clearly to a definite policy against commercialism in workshop presentations.

Conclusions—It should be kept in mind that the information given was received from approximately 40 per cent of the college radio workshops

listed by the Federal Radio Education Committee. Conclusions, therefore, may strongly indicate current trends if it is assumed that unlisted workshops are similar in nature to those polled.

There was no evidence that workshops offered for academic credit are being formed rapidly in colleges. There was evidence, however, that interest in the workshop movement is spreading.

It was impossible to tell whether or not workshops are being formed to supplement present courses, or to eliminate the need for specialized courses by covering all areas of broadcasting in the workshop course. The evidence did show that a majority of workshops require only interest in the course and a general interest in radio for admission, which implies that workshops are merely "added attractions" to other radio areas. In only a minority was even a high grade in other radio courses required.

With comparatively few exceptions every radio workshop had something in common with its neighbor. Most of the workshops were small and operated as inexpensively as possible. Regardless of size, membership, geographical location, or staff, the main objectives of workshops seemed to be the production of programs, and the study of radio through such productions.

In addition, the majority of workshops were similar in these respects:

Since colleges with educational FM or AM stations generally opened their

facilities to radio workshops, workshops at such colleges appear to be more active and prosperous. Even these colleges, however, operate with a limited amount of equipment.

Colleges with campus radiation or wired stations "scrape the barrel" on equipment, but facilities are still available to workshop students. The average college in this category does not even have a new console. Wire recorders appear to be preferred, probably because of their low price.

Colleges with equipment used only for class work leaned heavily toward recorders, apparently still preferring the disc type.

The number of questionnaires returned indicated a strong interest in radio workshops in California, Illinois, New York, Ohio, and Oklahoma. With the exception of Massachusetts, which had three workshops reporting, there appeared to be little interest in New England in academic credit workshops. Perhaps New England colleges lack the vision of what can be done in the public relations area by workshop shows.

One fact stands out: In the long run, each radio workshop is an individual workshop, the result of a local need, of an ever changing available talent and leadership pool, and of a persuasive demand by students for general radio knowledge.—SIDNEY A. DIMOND, instructor in radio and speech, Radio Division, Boston University School of Public Relations.

Events—Past and Future

New FM Stations for Wisconsin

The cause of radio education in Wisconsin received an added boost recently when Governor Oscar Rennebohm signed into law a measure previously passed by overwhelming votes in both houses of the Legislature to add two units to the network of stations being set up by the State Radio Council.

The stations, numbers five and six in an eight-station web, are to be located in the western part of Wisconsin, in accordance with the over-all plan for statewide coverage. H. B. McCarty, the Council's executive director, reports.

The Council was established by the 1945 Wisconsin Legislature to plan, develop, and operate an educational broadcasting system. In that session funds were appropriated for two sta-

tions. The 1947 Legislature appropriated for two more. The first four stations are already in regular operation 15½ hours daily. The two recently authorized are expected to be ready by mid-winter. The last two units needed to complete the network will be requested of the 1951 legislature.

The stations now on the air are WHA-FM, Dane County; WHAD, Waukesha County; WHKW, Calumet County; and WHSF, Marathon County. The next two will probably be in Dunn and La Crosse counties. All are in the non-commercial, educational band.

The State Radio Council consists of eleven members, representing administrative heads of the various state agencies expected to be most concerned with the use of the broadcasting facilities.

The Governor is also a member. All state departments have access to the air over the public facilities and a number of them have already appointed radio specialists to handle their broadcasting activities.

The major portion of the program service originates on the University of Wisconsin campus, in Madison. This has for years been the headquarters of WHA, "the oldest station in the nation," so the activity is not a new one. The same program is carried simultaneously by WHA, the university station, and the network, except that WHA is required to sign off at sunset, and the FM stations continue to operate until 11 p.m. nightly.

It is expected that outstanding program features will be originated at various points in the state, but it is not planned to establish studios at the various stations. Pick-ups will be either direct or by magnetic recording from the many educational institutions throughout the state. There is at least one public institution of higher learning relatively close to each of the stations. Some of these already have radio workshops in operation. A number of high schools also have well developed workshops in which radio programs can originate.

The passage of the most recent radio bill by the Wisconsin Legislature indicated a general acceptance of the state's radio work. Areas of the state which do not have the service available to them campaigned vigorously to get it. PTAs, labor organizations, farmers' organizations, teachers, women's clubs, luncheon clubs, chambers of commerce, and private citizens all united behind it. A number of commercial station operators went on record as favoring the network development. Their attitude was that the state stations were offering a type of service which it is not possible nor profitable for a commercial station to attempt. They felt that pressure on them for such programs would be reduced if they were available over the FM network. On the other hand, a few private station representatives campaigned vigorously in opposition to the plan but managed to swing only a few votes away from the bill. The vote on the measure in the Assembly was 59 to 16; in the Senate, 22 to 8.

With the network three-fourths provided for it is not anticipated that serious difficulty will be encountered

in securing its completion in two years. Such opposition as has existed has been due, it is believed, to a lack of understanding of the objectives of the plan. Once the service is established in an area it is accepted as a part of the educational system.

Michigan Broadcasts New Historical Series

A radio series to be released by the University of Michigan this month is expected to establish new values for broadcasting historical and educational topics.

Titled, *Treasures Off The Shelf*, the series will use a specific historical document or manuscript as the basis for each of thirteen dramatic programs. The William L. Clements Library, multi-million dollar collection of rare Americana at the University, will be the source of the documents to be featured.

The new series will focus attention on the several documents rather than upon the information they contain. One program, for example, concerns the code letter written by Benedict Arnold in which the General offers to sell West Point to the British commander-in-chief, Sir Henry Clinton. Written in Philadelphia in 1780, the letter contains some fresh information of historical import: for the first time in his negotiations with the enemy, Arnold here sets forth his price for treason. The defection, he writes, is worth twenty thousand pounds.

From the standpoint of general education, however, it is felt that the intrinsic worth of the letter is less important to a radio audience than a recreation of the total historical situation at the time the letter was written.

What tensions and conflicts tore at Arnold as he decided to betray the cause for which he had fought so notably? What dangers had to be faced in transporting the crucial letter from the American to the British lines? What impact did the offer have upon the plans and tactics of the British commander-in-chief?

The educational importance of the series will be supplemented by exhibits in the Clements Library. During the week following each broadcast, the particular document featured on the air will be placed on display. The public will be urged to inspect the original manuscript that figured in the radio story.

Other programs in the series will center about Columbus' report to Ferdinand and Isabella; a letter by George Washington which "accidentally" fell into British hands; a journal of exploration through Ohio and Southern Michigan; and an estray book picked up on the battlefield at Saratoga in 1777.

Additional items will be selected from the Clements Library's records of the American Revolution which include the papers and correspondence of Sir Henry Clinton, General Thomas Gage, Lord George Germain, and General Nathaniel Greene.

The programs begin the second week of October. They will originate in the studios of the University of Michigan's station WUOM-FM, and will be heard over some twelve additional stations throughout the state.

TV Course at UCLA

Richard J. Goggin, ABC-TV's Western Division program director, will conduct a course on "Introduction to Television" at the University of California at Los Angeles, starting with the fall term, according to Professor Kenneth Macgowan, chairman of the UCLA Theater Arts Department. Students will meet for an hour twice each week, and frequent visits will be made to TV stations in Los Angeles to observe shows and equipment demonstrations.

Included in the course will be the history of television, technical fundamentals of how it works, functions of the creative, administrative, and engineering departments of TV, programming and production, and educational and functional as well as entertainment uses of the video field.

IBA-WBEZ Series

Illinois Broadcasters Association is cooperating with Radio Council-WBEZ, Chicago public schools, in the preparation of 13 in-school broadcasts covering the industries, history, and communities of local stations. The series will be aired during second semester broadcasting for use in Chicago classrooms. Stations participating are: WSOY, Decatur; WROY, Carmi; WJJD, Chicago; WCVS, Springfield; WBNU, Aurora; WIBV, Belleville; WLBI, Mattoon; WSIV, Pekin; and WJPF, Herrin. The purpose of the series is to acquaint school children with down-state communities, all of which play an important part in the

business and economy of Chicago. It is possible that the radio chairmen of the Illinois Congress of Parents and Teachers may work out a plan whereby these recorded programs will rotate among stations for use in local schools other than Chicago.



Alpha Epsilon Rho

Alpha—New pledges are: Betty Cannon, Joan Van Arman, Lattie Lee Dawson, Barbara Rau, Barbara Schoenfeldt, Frances Smith, Peggy Patterson, Marilyn Hartman, Mary Lou Lead, Jan Newby, Betty Clay Shank, Sally Schupp, Rosalyn Miller, and Barbara Schott.

Beta—New initiates include: Kenneth Barrow, Edward Campbell, Robert Dyruff, Fred Elliott, Hal Golden, David Goldman, Charlotte Gordon, Stanley Hinden, Marvin Jacobson, Ralph Krueger, Harry Shemitz, William Volpe, and Hugh White.

Beta concluded its 1948-1949 activities with the initiation of the above actives, followed by a banquet at which Convention reports were given and plans were made for the fall. Mr. and Mrs. Eugene Foster and Lowell Johnson were guests of Beta Chapter.

Ki—Newly elected officers are: Edward Westhrook, *president*; Miriam Thrall, *vice-president*; Marcia McLean, *recording secretary*; and Jo Ann Holbrook, *corresponding secretary*.

At the May 29 initiation, the following pledges became AEP actives: Jo Ann Holbrook, William High, Mark Banks, Nobel Mackey, Hal Weed, Harold Kramer, and Edward Reamer. Initiation was held at the WMUB Studios, followed by a breakfast.

Iota—New AEP actives are: Truman Madsen, Elaine Martin, Marion Melberg, Judith Potter, and La Marr Smith.

Upsilon—New officers were elected on May 1. Patricia Cook is the new *president*, Hugh Keyes, *vice-president*, G. Thornton Garst, *secretary*, and Joan Penoyer, *treasurer*. Recently initiated actives include: Harlin Cook, G. Thornton Garst, Paul Yezell, William Rider, and Dick Campbell. L. L. Richards is a new associate member.

Pi—The following new actives were initiated in a formal ceremony in the studio of the Radio Department on April 12: Ed Booth, Marthala Brooks, Bill Fowler, Jack Lyle, Earl Porterfield, Paul Johnson, and Jarrell MacCracken. Dinner followed the initiation with entertainment provided by the newly initiated members.

Epsilon—New actives are: Jack Harter, Adlyne Gelawer, Selma Katz, Gene McPherson, Lou Ann Slatter, Ralph Boethe, Bernard Berkowitz, Marion Bergen, Caroline Weintraub, Myron Schomberg, Richard Coate, and Marilyn Williams.

Eta—New pledges are: Everett Holle, Rosalyn Zarovsky, Clayton Corzatte, and Frank Lee.

Chi—New pledges are: Malcolm MacDonald, Robert Galbraith, Ollie Parnes, Bernard Farwick, and Larry Foster.

Ki—Former president, Tom Nollath, is now production director of WSRN, Cleveland, and Barbara Reid, corresponding secretary, has joined the staff of WKRV, Richmond.

Questions concerning Alpha Epsilon Rho should be addressed to Betty Thomas-Gierling, *Executive Secretary*, Alpha Epsilon Rho, Station KUOM, University of Minnesota, Minneapolis 14.

Radio Workshops

Missouri Radio Workshop

What can be done when a radio station and educational leaders join forces has been demonstrated by the success of the KMOX-University of Missouri Radio Workshop for Teachers. Sponsored also by Lincoln University and the St. Louis Board of Education the Workshop, on July 1st, completed its fourth year. Started in a very small way by Station KMOX, it has grown to where its staff is made up of nationally known radio figures and its student body numbers about 85.

The two weeks' program was planned so that those attending could select the field in which they were most interested. This year, classes were held in the Utilization of Radio, either at elementary or high school level, Script Writing and Program Planning, and Radio Production. The entire workshop was under the direction of Carlotta Wetmore, educational director, Station KMOX, and Dr. I. Keith Tyler, director of radio education, Ohio State University. On the teaching staff in addition to Dr. Tyler, were Dr. Hale Aarnes, Stephens College; Martha Boyer, Lindenwood College; and Mrs. Margaret Carey Tyler, supervisor, Ohio School of the Air. The affiliation with two universities made it possible for those attending to earn two credits, graduate or undergraduate.

The opening session each morning brought many outstanding speakers to

the Workshop. They include Dr. George Crothers, assistant to the director, Education and Opinion Broadcasts, Columbia Broadcasting System; Edwin F. Hehman, director, Station WBOE, Cleveland; and members of the staff of KMOX and the local universities. These morning talks gave the students an overall view of radio and of its place in the educational picture. Sometimes these talks were followed by panel discussions and demonstrations, led by prominent educators.

Interest and color were added to the Workshop by the several foreign visitors who came to see the program in action. Among these visitors were Morgens Jensen, director of school broadcasts, Denmark; and Song Young Ho, Seiji Shimamura, and Hiroshi Nino—all of the staff of Radio Tokyo. Each was able to contribute to the Workshop by giving some idea of the part radio was playing in education in his country.

This Workshop is certainly filling a definite need in St. Louis and the Midwest. The very fact that some of the students were enrolled for the second and third time is proof of its value. Each teacher attending felt that she would go back to her classroom with a greater enthusiasm for radio and a better knowledge of how to use it as an educational tool.—LUCILLE SUTHERLAND, principal, Ashland School, St. Louis, Missouri.

Idea Exchange

Listeners Want FM

Owners of FM receivers in Madison, Wisconsin, have a definite preference for this new system of broadcasting, and four out of five who do not now own FM receivers say that they will insist on FM when they buy new sets. This information was gleaned from a study recently made in the area by WHA, the University of Wisconsin station, under the supervision of H. A. Engel, station assistant director.

The survey in which these findings were reported was made in late July

and early August [1949] on the basis of 1,000 completed telephone interviews. Of the thousand 991, or 99 per cent, had radio receivers of one kind or another.

The study was designed to find out the extent to which radio listeners in Madison have equipped themselves with FM receivers, and to determine what their attitudes are toward FM. Nearly one in five homes, 18.4 per cent to be exact, reported that they already had FM sets. Three years ago, before the advent of good low-price FM re-

ceivers on the market, FM receivers were a rarity in the community.

When asked which they preferred to listen to, FM or AM broadcasts, 74.2 per cent of those who had both available indicated a distinct preference for the FM. Though not asked why they preferred it many volunteered the information that they liked the static-free, high fidelity features of FM and the availability of programs not heard on AM. Of those who preferred AM a large number referred to the fact that certain of the network programs they wished to hear were not available on FM.

Combining the number already having FM receivers with that indicated as intending to get FM when another set is acquired, a figure equivalent to 84.4 per cent is reached. This corresponds with the opinions of experts who predict that in time most listeners will have FM receivers.

Lazarsfeld Reports Research

A "very sizeable" number of occasional and non-listeners could be attracted to increased listening of morning radio programs if their psychological characteristics were taken into account by station managers and program directors.

This conclusion comes from a study made by Dr. Paul F. Lazarsfeld and Mrs. Helen Dinerman for the Bureau of Applied Social Research of Columbia University. The study surveyed the listening habits of nearly 3,000 women in New York, Chicago, and Kansas City.

The study revealed that the women who make up radio's potential morn-

ing audience can be divided into three almost equal-sized groups: listeners to serials, non-listeners, and regular listeners who do not listen to serials. Present commercial station programming thus satisfies only one-third of the potential morning listening audience.

The research offers the following suggestions to station managers who wish to increase their morning audiences:

[1] There is need for programs which cheer, soothe, and in general divert the listener's attention from her own troubles;

[2] "Noise" greatly annoys many non-serial listeners. Morning programs should thus provide no extreme aural stimulus, whether in tone of voice, type of music, or any other aspect of the program;

[3] Suspense and tension are strongly disliked by non-serial listeners. The producer of morning programs would do well to employ some device other than suspense to insure day-to-day listening. An outstanding personality, a distinctive program idea, or some new device might serve this function;

[4] Personalization and human interest are extremely attractive to women morning listeners, even though they may dislike serials;

[5] Many non-serial listeners expect the radio to serve an informational and educational function. While some of these women would like real discussions of public issues and cultural topics, the majority are hungry for useful and concrete information relevant to their immediate daily life and social needs. Carefully planned and cohesive quiz programs would be greatly liked and would fulfill a real intellectual need;

[6] Music is the type of program most desired by women who dislike serials. Carefully-planned scheduling of additional musical programs would undoubtedly attract many non-serial listeners to additional morning listening.

New AER Members

Have you secured a new member for the AER this fall? Your Association will be just as large and just as successful as you make it. Do your bit today!

AER Record Review

Bill Scott—Forest Ranger [Series II]

Rating—This series receives a general rating of "good" from a Summer Radio Workshop under the direction of Mrs. Kathleen N. Lardie, station manager, Radio Station WDTR, Detroit public schools.

Specifications—A series of six 15-minute programs on 16-inch, 33 1/3 rpm transcriptions. Prepared originally by the Forest Service, U. S. Department of Agriculture, in cooperation with state forestry and conservation departments, and produced by Station

WNYE, New York City Board of Education. Available on loan from the Federal Radio Education Committee, U. S. Office of Education, Washington 25, D. C.

Description—These programs deal with conservation education. Six different episodes are presented in which Bill Scott and his two friends experience some of the problems that confront those who work in the forests. The titles and a brief summary of each program follow:

[1] "Wind in the Night." A summer wind storm creates havoc when a tree falls on the camp recreation hall and

cuts off the electricity. A radio message brings help. The boys learn that the damage done to forests by insects and disease is second only to that done by man's carelessness.

[2] "Old MacDonald Had Some Woods." A human interest story in which Ranger Bill sells modern ideas that aid the farm forester.

[3] "Flash Flood in Devil's Run." The tragedy of rising waters is averted when Bill Scott saves Penny Perkins. The community forest which had been delayed for so long becomes a reality.

[4] "Skin and Bones on the Hoot." Bill Scott and his young friends are taken on a quick journey searching for an escaped circus lion which preys on local livestock and at the same time they check the grazing range for a young ranger whose cows are in poor condition.

[5] "Wings Over the Forest." Bill and Sam have an exciting experience fighting a fire on the valuable water shed lands. The use of the helicopter shows the boys how modern inventions can aid man in protecting the forest.

[6] "Landslide." On their journey to a surprise barbecue for Bill Scott, Joe, June, and Sam encounter a landslide which almost spoils the day. A message by radio from Ranger Bill, however, directs their rescue and gives the day a happy ending.

Appraisal—The teachers and students who listened to these recordings were sure they had definite value for students who had no learning experiences in forestry. There was some difference of opinion regarding the group to which the programs were directed. Some believed the superman, Bill Scott, was a little overdone and felt that during such a long acquaintance with the boys he would become a little less awesome to them. Few of the students had had experiences in forests, but many thought that the sound effects, especially the horses' hooves, would not be as portrayed in the program. They agreed that the production was good, scripts well written, and that the sound effects and music added to the broadcast. They felt, however, that there was a little too much of contrasting material in the scripts. As an example, it seemed incongruous to several that a ranger bending over the bodies of his dead cattle would be interested in talking about the grazing land for his animals. All agreed that there was little material available to bring life in the forest home to the urban resident, and they felt that all students could profit by the experiences of Bill Scott—Forest Ranger. The students were also interested in the fact that this series was presented in cooperation with a school group. They lauded the efforts of the U. S. Department of Agriculture and the state forestry and conservation departments.—KATHLEEN N. LARDIE.